

**REMARKS**

Claim 1-3 are pending in this application. By the Office Action, claim 1 is rejected under 35 U.S.C. §102(b) and for obviousness-type double patenting. By this Amendment, the specification and claim 1 are amended and claims 2-3 are added. Support for amended claim 1 can be found in the specification at, for example, the Table on page 6. Support for new claims 2-3 can be found in the specification at, for example, paragraph [0014]. No new matter is added.

**I. Rejection Under 36 U.S.C. §102**

Claim 1 is rejected under 35 U.S.C. §102(b) over DE 1 177 538. Applicants respectfully traverse this rejection.

First, Applicants respectfully submit that the Office Action has not established a proper basis for rejection. The Office Action rejects the claim, merely stating that "[t]he search report indicates this reference anticipates the claimed electromagnetic wave absorber." However, the Office Action nowhere asserts how the reference anticipates the claim, and entirely fails to apply the disclosure of the reference to the limitations of the claim. Likewise, the Office Action nowhere indicates that an English translation of this German document has been obtained or reviewed. The Office Action has thus not established even a prima facie case of anticipation.

Second, Applicants submit that the reference does not anticipate the claim. Claim 1 recites limitations that do not appear to be disclosed in the reference, and thus the reference cannot anticipate the claimed invention.

Claim 1 recites an electromagnetic wave absorber formed of an Mn-Zn ferrite comprising: a spinel primary phase which contains 40.0 to 49.9 mol % FeO and Fe<sub>2</sub>O<sub>3</sub>, 4.0 to 26.5 mol % ZnO, and a remainder of MnO and Mn<sub>2</sub>O<sub>3</sub>; and a secondary phase which contains CaO as a base component, wherein a mass of the spinel primary phase accounts for 50.0 to

99.0 % of an aggregate mass of the spinel primary phase and the secondary phase. Claim 1 is amended herein to clarify that the spinel primary phase includes MnO and Mn<sub>2</sub>O<sub>3</sub>, although the specification describes that the Mn<sub>2</sub>O<sub>3</sub> is present only in minor amounts. Such an electromagnetic wave absorber is nowhere disclosed in the cited reference.

In the European Search Report, DE 1 177 538 is asserted to anticipate the claimed invention, based on the disclosure in Examples 2 and 3. However, Examples 2 and 3 of the reference do not disclose the claimed electromagnetic wave absorber having a spinel primary phase which contains the specified amounts of FeO and Fe<sub>2</sub>O<sub>3</sub>, ZnO, and a remainder of MnO and Mn<sub>2</sub>O<sub>3</sub>.

Attached hereto is a partial computer-assisted translation of the cited reference, and particularly of Examples 2 and 3 therein. As is evident from the translation (and indeed from the original German document), Examples 2 and 3 of the reference contain 46.0 mole% Mn<sub>3</sub>O<sub>4</sub>. However, the Examples do not disclose that the composition includes the claimed compounds MnO and/or Mn<sub>2</sub>O<sub>3</sub>. That is, the cited reference discloses compositions including the Mn<sup>4+</sup> manganese oxide, not the Mn<sup>2+</sup> or Mn<sup>3+</sup> species, required in the claimed invention.

Accordingly, because DE 1 177 538 fails to disclose all of the claim limitations, the reference does not anticipate claim 1. Reconsideration and withdrawal of the rejection are respectfully requested.

## **II. Obviousness-Type Double Patenting**

Claim 1 is rejected for obviousness-type double patenting over claim 1 of U.S. Patent Application No. 10/765,057. Applicants respectfully traverse this rejection.

Claim 1 of the present application is set forth above. Claim 1 of the '057 application recites an Mn-Zn ferrite: including base components of 44.0 to 49.8 mol % Fe<sub>2</sub>O<sub>3</sub>, 4.0 to 26.5 mol % ZnO, 0.8 mol % or less Mn<sub>2</sub>O<sub>3</sub>, and a remainder of MnO; containing 0.20 (0.20

excluded) to 1.00 mass % CaO as additive; and having a resistivity of  $1.5 \times 10^4 \Omega\text{m}$  or more and a surface resistance of  $1.5 \times 10^7 \Omega$  or more.. Claim 1 of the '050 application would not have rendered obvious the claimed invention.

In particular, claim 1 of the '057 application does not teach or suggest an electromagnetic wave absorber as claimed. The cited application claim fails to teach or suggest that the Mn-Zn ferrite is specifically an electromagnetic wave absorber, as claimed. Nor does the cited application claim teach or suggest that the Mn-Zn ferrite comprises both a spinel primary phase having the stated composition, and a secondary phase which contains CaO as a base component, as claimed.

Accordingly, because claim 1 of the '057 application fails to teach or suggest all of the claim limitations, the reference does not render claim 1 unpatentable for obviousness-type double patenting. Reconsideration and withdrawal of the rejection are respectfully requested.

### **III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Partial Computer-Assisted Translation of DE 1 177 538

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Example 2

It is come from a mixture with the following composition in mole percent:

44.0  $\text{Fe}_2\text{O}_3$  : 46.0  $\text{Mn}_3\text{O}_4$  : 10.0  $\text{ZnO}$

under addition of 0.2 weight percent calcium carbonate ( $\text{CaCO}_3$ ) and 1.0 weight percent tin oxide ( $\text{SnO}_2$ ). These oxides are ground and mixed for 24 hours in an iron mill with steel shot.

The mixture is then pressed into disks and is heated for 4 hours in pure oxygen to 1225°C.

After that a cooling in pure oxygen takes place during 15 hours.

The resultant material has the following characteristics:

Dielectric constant  $E = 110,000$

Loss angle  $\tan \theta = 0.9$

in 50 Hz, a temperature of approximately 20°C and a fair tension of about 5 volts.

Example 2

It is come from a mixture with following composition in mole percent:

46.0  $\text{Fe}_2\text{O}_3$  : 46.0  $\text{Mn}_3\text{O}_4$  : 8.0  $\text{ZnO}$

under addition of 0.2 weight percent calcium carbonate ( $\text{CaCO}_3$ ) and 0.2 weight percent titanium dioxide ( $\text{TiO}_2$ ).

These oxides are ground and mixed for 24 hours in an iron mill with steel shot.

The mixture is then pressed into disks and is subjected to a warmth treatment for 4 hours in air in 1225°C.

The cooling lasts 15 hours and is carried out in pure nitrogen.

The received material has following characteristics:

Dielectric constant  $E = 264,000$

Loss angle  $\tan \theta = 0.6$

in 50 Hz, a temperature of approximately 20°C and a fair tension of about 5 volts.